DOCUMENT RESUME

ED 052 566 EC 032 734

TITLE	Educable Mentally Handicapped - Research: Exceptional Child Bibliography Series.
INSTITUTION	Council for Exceptional Children, Arlington, Va. Information Center on Exceptional Children.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
PUB DATE	Feb 71
NOTE	21p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Annotated Bibliographies, *Bibliographies, *Educable Mentally Handicapped, *Exceptional Child Research, Mentally Handicapped, *Research Projects

ABSTRACT

Sixty-eight references selected from Exceptional Child Education Abstracts are included in the bibliography on research dealing with the educable mentally retarded. The bibliography is one in a series of over 50 similar listings related to handicapped and gifted children. For each research study, bibliographic data, availability information, indexing and retrieval descriptors, and an abstract are included. Author and subject indexes are provided. (KW)

EC032734

ED052566

EDUCABLE MENTALLY HANDICAPPED—RESEARCH

A Selective Bibliography

February 1971

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EC 032 734

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ABSTRACTS

ABSTRACT 10213

EC 01 0213 ED 018 898
Publ. Date 67 79p.
Candland, Douglas K.; Manning, Sidney Alpern
Studying Learning Patterns in Mental Retardates.
Bucknell Univ., Lewisburg, Pa.
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; learning; reinforcement; children; learning characteristics; educable mentally handicapped; trainable mentally handicapped; custodial mentally handicapped; intelligence level; learning processes; retention; memory; recall (psychological); performance factors; performance tests; rewards; task performance; time factors (learning); verbal learning; perceptual motor learning; males; females; learning processes; cognitive processes

Five experiments were conducted in an attempt to isolate specific learning patterns in children of varying degrees of mental retardation and to contribute to the knowledge of the phylogenetic development of intelligence. Factors studied were those known to influence learning in normal children and adults--kind of reinforcement (verbal or physical), delay of reward, shift of reinforcement, intertrial interval, and reminiscence. The subjects were male and female institutionalized retarded children, aged 8 to 18, and classified as mildly, moderately, or severely retarded. Groups varied in size, and were evaluated in the completion of motor or verbal tasks (pursuit motor, pegboard, memory drum tasks). Conclusions drawn from the series of motor task experiments were as follow--(1) males generally achieve a performance level significantly superior to females, (2) different rewards do lead to significant differentiation in performance, (3) delay of reward does not have a significant effect on the performance of retardates when a sensory reward (such as light) is used, (4) mild retardates perform at a level significantly superior to moderate retardates, and both groups are superior to severe retardates, (5) the expected elation and depression as a result of a shift in reinforcement do not appear to occur in retardates, although these subjects do show an interest effect or improvement in performance following any shift in reinforcement, (6) the length of intertrial interval does not significantly affect the performance of retardates when intervals of 10 seconds or less are used, (7) retardates do not show a reminiscence effect in verbal learning, but there is some indication that the reminiscence does occur in motor learning, and (8) age, IQ, and mental age cannot be used as accurate predictors of performance on either verbal or motor tasks. Data are presented in 17 tables and 12 figures. A bibliography lists 103 items. (DF)

ABSTRACT 10249

EC 01 0249 ED N.A.
Publ. Date Jan 67 130p.
Rau, Dorothea Natalie
Parental Teaching of the Educable Mentally Retarded Child as Related to School Achievement.
Illinois Univ., Urbana
OEC-4-10-241
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; family (sociological unit); achievement; academic achievement; parent child relationship; educable mentally handicapped; parent participation; parent influence; family influence; high achievers; low achievers; socioeconomic status; children; interviews; task performance; research

The investigation was designed to identify home influences related to the school achievement of the educable mentally retarded (EMR). Thirty-six subjects (chronological age 9-0 to 12-11, IQ 55 to 75) were selected from the special school district of St. Louis County, Missouri, and represented especially high or especially low school achievement. The sample was further subdivided into higher and lower socioeconomic groups. Both parents were questioned about their activities with the child. In a later session the mother was asked to teach specified block designs and tests of general information from the Wechsler Intelligence Scale for Children to the child. The tape recorded responses from the parents were then scrutinized by means of detailed content analyses. The relationship between characteristics of the sample and the categories of information from the parents was determined through Pearson product moment coefficients of correlation. Results indicated signs of imbalance among the subgroups of the sample--(1) significantly less achievement discrepancy was observed among the high achievers of the lower socioeconomic group as compared to the high achievers of the higher socioeconomic group (p is less than .05), (2) the high achievers in both socioeconomic groups differed from the low achievers in that they generally had a lower IQ, mental age, and expected grade placement (p is less than .05), and (3) a disproportionately high representation of girls was found in the higher socioeconomic group (at the .01 level of confidence). Results from the parent interview indicated (1) fathers of high achievers, regardless of socioeconomic level, mentioned with significantly high frequency their social emotional dealings with the child (p is less than .01), and mothers gave little verbal control, and (2) consistently negative correlations between parental teaching and achievement of the child indicated an excessive amount of verbosity of mothers of low achievers. Also, fathers of low achievers remarked infrequently about a social emotional relationship with child. The study thus suggests that a father's social emotional dealings may importantly counteract a verbal overprotection of the EMR child by his mother and may positively influence the child's school progress. A 51-item bibliography is included. (AA/RS)

ABSTRACT 10282

EC 01 0282 ED 017 087
Publ. Date 66 203p.
Baller, Warren R. And Others
Mid-Life Attainment of the Mentally Retarded, a Longitudinal Study.
Nebraska University, Lincoln
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; adjustment (to environment); longitudinal studies; case records; economic status; employment level; followup studies; marital status; slow learners; social status

Mentally retarded, slow learning, and normal subjects who had been evaluated during the 1930's were located. Their present status and functioning were reported and the study searched for reasons for the subjects different levels of life adjustment. Over 400 of the original subjects were located. They were in their middle fifties at the time of this study. Each subject was interviewed or responded to a life history questionnaire. Social status was evaluated. A sample was given intelligence tests. Results indicated that the mentally retarded group had a higher death rate than the other two groups. The mentally retarded group members were more likely to live alone and also had a higher divorce rate. Although the mentally retarded group had shown steady improvement in self support over the years, their unemployment rate was still above the national average. All groups were generally law abiding. Those subjects in the mentally retarded group tended not to participate as much socially as subjects in the other two groups. No significant gains in intelligence had been made by any group. The low group had had fewer desirable experiences. Case studies of successful (four males, four females) and unsuccessful (four males, four females) subjects from the low group are presented. Factors relating to their successful and unsuccessful life adjustments are discussed. Recommendations are made about the mentally retarded and about further research. Questionnaires used are reproduced. Data is presented in 120 tables. The bibliography lists 33 items. This paper was published as an article in Genetic Psychology Monographs, Volume 75, second half, pages 235-329, May 1967. (JA)

ABSTRACT 10328

EC 01 0328 ED 012 141
Publ. Date 05 Jan 67 262p.
Goheen, Royal L.

The Development and Evaluation of Three Types of Physical Education Programs for Educable Mentally Retarded Boys. Final Report.
Boston Univ., Massachusetts, School Of Educ.
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; physical education; educable mentally handicapped; psychomotor skills; athletics; males; adolescents; children; physical fitness; social adjustment; Latchaw Motor Achievement Test; AAHPER Youth Fitness Battery; Corvell Social Adjustment Index

Three physical education programs, skill oriented, play oriented, and free-play oriented, were developed. These programs were examined initially by seven experts and then subjected to a pilot study. The revised programs were taught by research assistants to six experimental groups which included 82 boys at two state schools for the mentally retarded. The instructional period was 39 class hours (13 weeks) in duration exclusive of time taken for purposes of evaluation. The programs were evaluated on the basis of pretests and posttests which ascertained achievement levels in items relating to physical fitness, motor ability, and social adjustment. Major conclusions were (1) that the skill oriented groups at both schools indicated significant improvement in a greater number of test items than did the others, (2) that these same two groups indicated a more uniform improvement in motor ability items, (3) that the skill oriented group at one school indicated significantly better performances than the other groups at that school in the pull-ups and volleyball wall volley, (4) that both the skill oriented and free-play group at this school were significantly better than the play oriented group in the basketball wall pass. A major recommendation is that a skill oriented physical education program, similar to the one developed in this study, be utilized for educable mentally retarded boys. (UM)

ABSTRACT 10329

EC 01 0329 ED 014 824
Publ. Date 18 Nov 66 206p.
Corter, Harold M.; McKinney, James D.
Cognitive Training with Retarded Children. Part 1. Final Report.
North Carolina St. Univ., Raleigh
OEG-32-43-0530-5028
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; cognitive processes; achievement; educable mentally handicapped; concept formation; cognitive development; adolescents; children; cognitive tests; concept teaching; curriculum guides; intellectual development; development; intelligence tests; learning activities; productivity; Stanford Binet Intelligence Scale; Wechsler Intelligence Scale for Children; Illinois Test of Psycholinguistic Abilities; California Achievement Test; Corter McDonald Similarities Differences Test

The major purpose of this research was to determine whether training in specific cognitive processes is effective in increasing the cognitive functioning of retarded children. In phase 1 of the project, 51 educable retarded and 18 normal subjects received a 20-day program in similarities-differences concept formation and were compared with 42 educable retarded and 24 normal control subjects. Change scores for the experimental and control groups on 30 test variables, including concept formation, reasoning, intelligence, and achievement tests, were compared by t tests and a multivariate analysis of variance. The hypothesis concerning improvement in concept formation was strongly sustained. Also gains were observed in related areas of reasoning and, to a lesser extent, in verbal areas. Hypotheses of change in general intelligence and achievement were not sustained when similarities-differences effects were removed, although a general trend in favor of the experimental groups was noted. In phase 2, 16 educable retarded and 16 bright normal subjects received a 20-day program in cognitive flexibility and were compared to 16 control subjects in each group by a 2 X 2 factorial design. Change was measured by a flexibility test battery composed of five subtests and the Stanford-Binet Intelligence Scale. Significant improvement in the predicted direction was found for both test variables. In phase 3, a test and training program in the area of productivity-responsiveness was developed to the tryout stage. Appendixes include day by day plans for (1) the similarities-differences concept formation training program, (2) the cognitive flexibility training program, and (3) a teachers manual of the productivity-responsive training program. The factor analysis of the flexibility tests and the cognitive training experimental test battery are included. A bibliography cites 44 items. (AA)

ABSTRACT 10416

EC 01 0416 ED 014 190
Publ. Date Aug 67 165p.
Higgins, Conwell; Rusch, Reuben R.
Development and Evaluation of Auto-Instructional Programs in Arithmetic for the Educable Mentally Handicapped. Final Report.
Albany Public Schools, New York
EDRS mf,hc

Descriptors: exceptional child research; mathematics; mentally handicapped; programed instruction; educable mentally handicapped; autoinstructional programs; arithmetic; teaching machines; audiovisual programs; children; experimental programs; program development; program evaluation; program materials; programed units; Audio Visual Manipulative Desk

The purpose of this project was (1) to develop educational media for teaching educable mentally handicapped (EMH) children arithmetic concepts and (2) to evaluate the developed programed instructional materials. During the first phase of the study the activities were devoted toward accomplishing the first purpose, developing the equipment and materials. Several devices and combinations of devices were used during the trial period. The device finally developed, referred to as the audio-visual manipulative (AVM) desk, presents information on a screen through the use of a slide projector. Audio messages are transmitted through earphones and a speaker, and the child manipulates objects or writes on the response surface. Twenty-one different sequential arithmetic programs were developed for the desk for teaching EMH children skill sequences in arithmetic. Desk administered tests were also developed to assess the child's understanding of these concepts. Other materials developed include (1) a manual of instructions for teachers (which includes the program objectives) and (2) reinforcement materials for classroom use. During the evaluation phase of the study, four separate field studies were conducted. The results of these studies show that (1) the AVM system was an effective variable in producing differential results, (2) going through programs twice did produce higher posttest scores than going through the programs once, (3) the system could be used effectively in a classroom setting under the supervision of classroom teachers, and (4) programs developed for EMH children were not appropriate for trainable mentally handicapped children. The appendixes include detailed information on the desk and arithmetic programs. Twenty-three references are listed. (AA)

ABSTRACT 10417

EC 01 0417 ED 019 780
Publ. Date Mar 67 68p.
Ross, Sheila A.
Improving the Social Behavior of Young, Educable Mental Retardates. Final Report.
Palo Alto Med. Res. Found., California
OEG-446-068149-1552
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; behavior; cognitive processes; educable mentally handicapped; social change; interpersonal competence; training techniques; instructional media; logical thinking

To increase the young educable mental retardate's knowledge of appropriate social responses, a training program was designed utilizing the practical syllogism. Subject groups, aged 3-9 to 10-3, included (1) 32 educable mental retardates with a mean IQ of 66, divided into control and experimental groups of 16 each, (2) 16 average children with IQ's of 90 to 110 or in the 50th to 60th percentile on group readiness and ability tests, and (3) 16 above average children with IQ's of 125 to 145 or above the 90th percentile on the same group tests. Both the retarded groups were given 120 training incidents using doll play, live models, puppets, and film slides. Training for the experimental (E) group was in responses to six common types of

social situations such as asking for assistance or responding to disapproval. Training for the control (C) group was in verbal and problem-solving skills. The average group received no training. Pretests and posttests measured logic and social behavior. Results indicated that (1) after training the E-group was significantly higher than the C-group on logical thinking (p less than .05) and social behavior (p less than .0005), (2) although the C-group scored lower than the E-group after training, it scored significantly higher after training than before on logical thinking (p less than .05) and social behavior (p less than .01), (3) before training the retarded groups scored significantly lower than the average group on logic (p equals .001) and social behavior (p equals .0005), and (4) after training the E-group scored significantly lower than the average group on logic (p less than .005) but higher on social behavior (p less than .05). Results thus confirmed the hypotheses that (1) retarded children have less skill in logical thinking and knowledge of social behavior than average children, and (2) with training, retarded children can improve in logical thinking and may reach or surpass the level of average children in knowledge of social behavior in specific commonly occurring situations. (AA/MY)

ABSTRACT 10503

EC 01 0503 ED 022 270
Publ. Date Nov 65 139p.
Katz, Elias

An Independent Living Rehabilitation Program for Seriously Handicapped Mentally Retarded Adults. Final Report.

San Francisco Aid Retarded Children, California
Vocational Rehabilitation Administration (DHEW), Washington, D. C.
EDRS mf,hc
RD-902-P

Descriptors: exceptional child research; mentally handicapped; vocational rehabilitation; program planning; adjustment (to environment); educable mentally handicapped; trainable mentally handicapped; interpersonal competence; young adults; vocational training centers; community programs; program evaluation

The Independent Living Rehabilitation Program provided non-residential community rehabilitation to meet the personal, vocational, and social needs of seriously mentally handicapped young adults. After both an initial and an 8-week evaluation period, 75 enrollees were admitted for up to 2 years of training. Of the 75, 57 percent were classified as educable, 40 percent as trainable, and the remainder as mild (IQ over 75). Half were under 20 years of age. Of the 56 enrollees who completed the program's work-training experiences and social services, 13 were vocationally rehabilitated and 23 were placed in the Adult Training Center with only limited provision for gainful employment. Although there was no change in social competency ratings, some improvements were noted in a greater independence, the use of social services, and global ratings. Information on the program is given concerning influences, admission, referral sources, enrollees, and effect. Areas of program organization detailed are direct and supportive services, training and social services, the community, staffing and administrative tasks, and program evaluation procedures. Also provided are a 53-item bibliography, 27 tables (on the enrollees' characteristics, backgrounds, and progress ratings), three case studies, and a social competency rating scale. (BW)

ABSTRACT 10636

EC 01 0636 ED 024 196
Publ. Date Jun 68 87p.
Bijou, Sidney W.

Research in Remedial Guidance of Young Retarded Children with Behavior Problems Which Interfere with Academic Learning and Adjustment. Final Report.

Illinois University, Urbana
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-32-23-1020-6002
BR-5-0961

Descriptors: exceptional child research; behavior; preschool children; mentally handicapped; reinforcement; teacher education; teaching methods; behavior change; operant conditioning; motivation; programed instruction; reading; writing; mathematics; parent participation

A 4-year research project developed a preschool program for exceptional children unable to attend public school but not needing to be institutionalized on the basis of empirical behavioral principles. Children were referred from agencies and most had already unsuccessfully used special school services. The average age was 5-5 years, average IQ was 83, and average mental age 4-3 years; scores on the Wide Range Achievement Test averaged early kindergarten level. Utilizing special features in the physical plant, curriculum, and operation of the school, behavioral principles were applied to weaken behaviors interfering with academic learning and to strengthen desirable social and intellectual behaviors. Reading, writing, and arithmetic programs were developed as well as procedures for maintaining motivation for learning. Specific techniques were applied to modify the behavior of aggressive, shy, and speech deficient children. Investigators worked with parents at home, and the parents supplemented the nursery program. Objectives and procedures of a teacher training program are specified; a bibliography with 23 entries, a list of 10 publications resulting from this research, samples of program studies from the first 2 years, case studies, and eight figures are included. (Author/SN)

ABSTRACT 10652

EC 01 0652 ED 023 243
Publ. Date Dec 67 91p.
Ross, Dorothea

The Use of Games to Facilitate the Learning of Basic Number Concepts in Preschool Educable Mentally Retarded Children.

Stanford University, California
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-4-6-062263-1585
BR-6-2263

Descriptors: exceptional child research; mentally handicapped; recreation; mathematics; teaching methods; children; test reliability; test results; motivation; instructional materials; behavior change; group behavior; attention control; educable mentally handicapped; group tests; educational games

Group games were used to teach basic number concepts to educable mentally retarded children. The number concepts were integral but incidental to the intentional teaching of game skills. Subjects were 21 boys and 19 girls from eight classes, free of gross defects (means were IQ equals 66.22, age equals 7.9, mental age equals 5.11), and matched in pairs for chronological age, mental age, IQ, and scores on pre-experimental tests of number concepts, game skills, preference for social play, and voluntary social participation in school. The experimental group of 20 participated 100 minutes a week in a 9-month game program; the control group, also 20, attended a traditional math program; and both were tested at the middle and end of this period. The experimental group scored higher on both mid-experimental (p less than .003) and post-experimental (p less than .0003) measures on the Number Knowledge Test (test reliability equals 98% on Form A and 93% on Form B), higher on the post-experimental measure (p less than .002) on the spontaneous use of quantitative terms, and made fewer errors on both the mid-experimental (p less than .0005) and post-experimental (p less than .0005) tests on General Game Skills (test reliability equals 91%). Game and modeling procedures and attention directing variables (use of excitement and rewards) are suggested as teaching techniques for retarded children, and a handbook for teaching game skills is included. (Author/SN)

ABSTRACT 10826

EC 01 0826 ED 025 885
Publ. Date Sep 68 136p.
Bonfield, John R.

Predictors of Achievement for Educable Mentally Retarded Children. Final Report.

Pennsylvania State University, University Park
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-0-8-082082-3593(032)
BR-8-2082

Descriptors: exceptional child research; mentally handicapped; tests; achievement; educable mentally handicapped; institutionalized (persons); individual tests; group tests; predictive ability (testing); reading achievement; achievement tests; arithmetic; predictive validity; age differences; reading; testing

A study of institutionalized educable mentally handicapped children (EMR's aged 6-7 to 12-6) was designed to evaluate the use of subtest combinations and learning tasks as predictors of achievement compared to single individual and group tests. Fifty-one subjects received a pretest battery of six individual tests, one group test, three learning tasks, and the criterion achievement measures of three subtests from the Wide Range Achievement Tests (WRAT) and the New York Achievement Tests (NYAT). After 7 months the learning tasks, WRAT, and NYAT were readministered. Results indicated that overall achievement of young institutionalized EMR's will be predicted with higher validity both by a combination of the Auditory-Vocal Association and Auditory-Vocal Automatic subtests from the Illinois Tests of Psycholinguistic Abilities, the Picture Vocabulary subtest from the Pictorial Test of Intelligence, and the Number Facility and Perceptual Speed subtests from the Primary Mental Abilities Test (correlation coefficient equals .779), and by a regression equation developed from a multiple regression analysis of selected subtests than by any individual or group test. The better predictors of achievement for the oldest group were subtests which can be administered to groups; individual administered tests were better predictors at younger ages. (RP)

ABSTRACT 10844

EC 01 0844 ED 002 762
Publ. Date 58 172p.
Johnson, G. Orville
Comparative Studies of Some Learning Characteristics in Mentally Retarded and Normal Children of the Same Mental Age.
Syracuse University, New York
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-SAE-6416 CRP-091

Descriptors: exceptional child research; mentally handicapped; learning; average students; comparative analysis; comparative testing; elementary grades; children; learning characteristics

Information was obtained concerning basic learning characteristics of retarded children using, insofar as possible, materials with which they have had little or no previous familiarity. Subjects were 30 mentally retarded and an equal number of normal children ranging from 8 to 9 years in mental age. Each subject was given standardized lists of nonsense syllables; tests involving cancellation of selected numbers in a series of six-place numbers; assembly tasks; and object, picture, and work problems of reasoning. The data were analyzed through standard statistical analyses of differences between groups, and individual data sheets were analyzed and charted to note individual similarities and differences. It was concluded that the learning rate of mentally handicapped children is at least equal to that of normal children of the same mental age or developmental level. Thus a group of mentally handicapped children will be able to learn specific skills at that developmental level at least equally well and equally rapidly. However, it will take the mentally handicapped group approximately 1 1/2 years to develop as much intellectually as normal children develop in a year. Since the present series of studies was largely theoretical in nature, a parallel series concerned with tasks involving academic learning should follow. (GC)

ABSTRACT 11290

EC 01 1290 ED 023 239
Publ. Date 67 233p.
Edgerton, Robert B.
The Cloak of Competence; Stigma in the Lives of the Mentally Retarded.
EDRS not available
University Of California Press, Berkeley, California 94720 ($5.75).

Descriptors: exceptional child research; mentally handicapped; adjustment (to environment); vocational adjustment; adults; emotional adjustment; personal adjustment; social adjustment; adjustment problems; marital status; self concept; self esteem; role conflict; family relationship; employer employee relationship; friendship

The research staff contacted 53 mentally handicapped patients (mean age 34.3, mean IQ 65.3; 28 women, 25 men) discharged from a state hospital training and rehabilitation program. The 48 who cooperated were interviewed and studied for the ways in which they managed their lives and perceived themselves. No difference was found between the success and community adjustment by those above or below an IQ of 70. None of those studied would admit to mental retardation, and all had built stories to excuse their mental and social incompetence and their hospital stay, and to maintain their self esteem. Their sterilization was a major factor in the inadequate self concept but not in marital adjustment itself; sexual behavior did not differ from that of the general population. Nine of the 20 men were married, two to normal wives whom they supported, and 20 of the 28 women were married, 16 to normal men. Benefactors were found to be present and necessary in all cases to assist the ex-patients in coping with life and basic needs, and generally aided them to pass as normal. Motivation of benefactors always involved altruistic reasons and usually practical ones: 12 were supervisors in sanitariums or restaurants which regularly recruited those discharged from the state hospital; 13 were spouses or lovers, most of whom enjoyed a dominant relationship; 10 were close relatives; and 10 were neighbors or landladies. (SN)

ABSTRACT 11345

EC 01 1345 ED 003 276
Publ. Date Jan 64 266p.
Peck, John R. And Others
Success of Young Adult Male Retardates.
Texas University, Austin
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-1533

Descriptors: exceptional child research; mentally handicapped; achievement; tests; educable mentally handicapped; predictive validity; student characteristics; student motivation; academic achievement; comparative analysis; factor analysis; youth programs; personality; training; males; young adults; questionnaires

The habilitation of educable mentally retarded (EMR) youth was studied to determine the effectiveness of predictor variables. Tests and interviews by questionnaires were made on five groups of youths with 25 in each group. Data were analyzed to determine the relative weights of each variable and measure. Differences among the experimental groups were tested and comparisons made with the control sample. Conclusions were the following: personality aspects were interrelated; measures of personality and cognitive attributes were valid predictors of success; and EMR youths participating in a training program achieved and were more successful than those who had little or no training. Recommendations were made to modify the battery of predictor instruments for screening use and explore the relationship between character development and success. (RS)

ABSTRACT 11346

EC 01 1346 ED 002 804
Publ. Date Apr 62 148p.
Leichman, Nathan S.; Willenberg, Ernest P.
Parent Attitudes in Rearing Mentally Retarded Children.
California State Department Of Education, Sacramento
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-SAE-7146 CRP-175

Descriptors: exceptional child research; mentally handicapped; family (sociological unit); parent attitudes; mental retardation; children; parent child relationship; parent responsibility; child rearing; family prblems; factor analysis; motivation techniques; rewards; parent education; interviews; educable mentally handicapped; trainable mentally handicapped; parent school relationship; self evaluation; attitudes

Positive and negative aspects of rearing mental retardates were identified and measured during this study by examinations of parental attitudes and how these attitudes often affect the daily behavior and learning readiness of children while in school. Behavioral factors of the individual child were analyzed and compared with statistics covering family

status and stability, and both considerations were investigated as relative contributors to parental attitude. The sample was drawn from parents of 400 mentally retarded children, varying in mental ability and family-school environments and representing a wide range of social, economic, and cultural influences. The data were gathered through direct interviews with the parents. Findings indicated that most pertinent in an index of family acceptance or integration were those qualities in the parents themselves related to high self esteem, low child rearing anxiety, low sex anxiety, high husband-wife agreement on child rearing techniques, low feelings of self blame, and high affectional interchange between the child and both parents. Further research was indicated in the areas of parent counseling and parent-school interaction and cooperation. (JH)

ABSTRACT 11594

EC 01 1594 ED 021 948
Publ. Date Dec 67 164p.
Hodges, Walter L. And Others
The Development and Evaluation of a Diagnostically Based Curriculum for Preschool Psycho-Socially Deprived Children. Final Report.
Indiana University, Bloomington, School Of Education
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-32-24-0210-1011
BR-5-0350

Descriptors: exceptional child research; disadvantaged youth; preschool children; adjustment (to environment); achievement; mentally handicapped; language development; motor development; social development; intellectual development; educable mentally handicapped; slow learners; culturally disadvantaged; preschool programs; kindergarten children; educational diagnosis; curriculum; curriculum development; curriculum evaluation; cognitive processes; psychological patterns

A study investigated the effectiveness of a 1-year diagnostic preschool curriculum in improving regular school adjustment and achievement of 142 psychosocially deprived children (age 5, IQ's 53 to 85). In each of 3 years, approximately 15 children were placed into an experimental preschool, a kindergarten contrast, or an at-home contrast group. Curriculum procedures were designed to remedy specifically diagnosed deficits in the areas of intelligence, language, motor, and social development. By the end of the treatment year, the experimental groups ranked significantly higher than the contrast groups in all of the areas named above. Followup study through the second grade for the 1st year group and through the first grade for the 2nd year group indicated that the groups no longer differed significantly in any area except that of social development, which continued to be higher for the experimental groups. School academic achievement appeared not to be related to overall IQ change, but rather to specific intellectual processes that contributed to the IQ change; that is, if children made gains on items related to memory, vocabulary, and motor development, the prognosis for their first grade academic success was better than if they made gains on items related to concept formation and abstract reasoning. (Author/JD)

ABSTRACT 11662

EC 01 1662 ED 003 176
Publ. Date 29 Feb 64 370p.
Blackman, Leonard S. And Others
The Development and Evaluation of a Curriculum for Educable Mental Retardates Utilizing Self-Instructor Devices for Teaching Machines.
Edward R. Johnstone Training And Research Center
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEG-7-28-073 NDEA-VII A-368

Descriptors: exceptional child research; mentally handicapped; curriculum; programed instruction; programed materials; instructional technology; skill development; adolescents; autoinstructional aids; curriculum development; curriculum evaluation; educable mentally handicapped; program evaluation; instructional programs; teaching machines

An evaluation of self instructional devices in the classroom and the related psychological research is presented. Part 1 covers phases of machine and program development, a review of relevant literature, and the major experiment. Educable mentally retarded 14-year-olds were selected and divided into two groups. The experimental group consisted of 19 persons and the control group of 17. Both groups were tested at the beginning and end of the year. The experimental group received programed instruction, and the control group was taught conventionally. Analysis of the data showed negative results in the effectiveness of machine instruction skill development with the exception of one arithmetic measure. Further research was encouraged to study the psychological properties of school tasks. Part 2 includes theoretical statements and literature surveys. (RS)

ABSTRACT 11918

EC 01 1918 ED N.A.
Publ. Date 66 210p.
Clausen, Johs.
Ability Structure and Subgroups in Mental Retardation.
EDRS not available
Spartan Books, 432 Park Avenue South, New York, New York 10012 ($10.00).

Descriptors: exceptional child research; mentally handicapped; ability identification; educable mentally handicapped; clinical diagnosis; testing; lateral dominance; auditory evaluation; visual perception; psychomotor skills; auditory perception; kinesthetic perception; intelligence; etiology; statistical analysis; perceptual development; motor development; test interpretation; neurological defects

To test the hypothesis that the mentally retarded represent a diversity of functional problems, and that they may be differentiated into subgroups on the basis of psychological functions, 276 retardates (191 boys and 85 girls), ages 8 to 12, were tested and compared to 112 normal boys, ages 8 to 10. Consideration was given to whether different functions have different rates of development, and whether development in retardates is characterized by a delayed progress up to a normal level or by an early termination of progress. A battery of 33 medical, neurological, and electroencephalographic exams yielded 50 variables. Similarity of profiles for the retardates indicated a general structure of abilities; information suggested that there is more justification for calling the subjects permanently deficient rather than retarded. All retardates generally had group means one standard deviation below normals for sensory measures, and were lower in perception and complex mental functions. Although there was some improvement with age, retarded subjects were impaired in most motor performances; simple motor tasks were more impaired than complex ones. No significant differences were found between etiological groups. (RJ)

ABSTRACT 11969

EC 01 1969 ED 031 002
Publ. Date Oct 67 160p.
Payne, Dan And Others
A Comprehensive Description of Institutionalized Retardates in the Western United States. Final Report.
Western Interstate Commission For Higher Education, Boulder, Colorado
National Institute Of Child Health And Human Development, Bethesda, Maryland
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; census figures; institutionalized (persons); statistical data; data collection; cooperative programs; self care skills; intelligence; etiology; family relationship; behavior; sex differences; educational experience; individual characteristics; mongolism; family characteristics; research utilization; Western Interstate Commission for Higher Education; WICHE

For 3 years, from 1966-68, data were collected representing the behavioral, social, and medical characteristics of over 20,000 retardates, the residential population of 22 state institutions for the mentally retarded in 13 western states. The data were returned to the institutions where they stimulated research, program development, evaluation, and inter- and intrainstitutional cooperation. Research uses and administrative uses of the data are discussed and illustrated by studies comparing phenylketonurics and mongoloid retardates with matched retarded controls, studies presenting characteristics for subgroups of mongoloids, and other. Twelve graphs and 40 tables present descriptive data and statistical analyses. (LE)

ABSTRACT 12024

EC 01 2024 ED 030 991
Publ. Date (68) 46p.
Brown, Louis F.; Andrews, James B.
A Summer School Outdoor Educational Program for Culturally Disadvantaged Educable Mentally Retarded Children. Status Report.
Iowa University, Iowa City, University Hospital School
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEG-3-6-068646-1750

Descriptors: exceptional child research; mentally handicapped; disadvantaged youth; recreational programs; student evaluation; outdoor education; summer programs; camping; science instruction; homemaking skills; educable mentally handicapped; physical education; self concept; sociometric techniques; personal adjustment; tests

Fourteen culturally deprived educable mentally handicapped children (ages 126 to 168 months, IQ's 52 to 86) participated in a 7-week project to determine the effectiveness of correlating classroom instruction with camping and outdoor educational activities. The subjects were first tested for current knowledge and attitudes about science, recreational camping, and themselves; they also received instruction in homemaking, science, and camping. Then the subjects practiced on campsite what they had learned in the classroom. Finally they were evaluated by the same instruments as earlier and were given opportunity to react to the camping experience. It was concluded that the activities offered will not replace those of physical education programs and that the experiences gained and the subjects' ease in verbalizing seemed to enhance their self concept and family status. A significant change in the positive direction was noted in the subjects' concept of the magnitude of their problems in reading, health, and personal adjustment; their knowledge of natural science also showed a significant gain. No significant changes occurred in group status, although there was some shifting of children in the middle of the sociogrametric region. Recreational activity preferences were altered, although not significantly in favor of those offered. (JD)

ABSTRACT 12033

EC 01 2033 ED 003 074
Publ. Date 65 171p.
Myers, Richard K.; Stevens, Godfrey D.
The Influence of Verbal Statements Upon the Performance of Mentally Retarded Children.
Beaver County Public Schools, Pennsylvania
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-S-162

Descriptors: exceptional child research; mentally handicapped; learning; teaching methods; educable mentally handicapped; performance factors; task performance; anxiety; educational experiments; verbal communication; instructional improvement; discussion (teaching technique); measurement instruments

Influence of performance expectations verbally expressed by an authority figure and the manifest anxiety of the subject on simple and complex learning tasks was studied in relation to mentally retarded children. The hypotheses tested were that there would be no difference in performance on the experimental tasks as a function of verbal statements of performance expectations, manifest anxiety level of the subject, sex of the subject, complexity of the tasks, and interactions of the variables. Subjects were randomly assigned to 12 experimental groups which were tested using tasks representing different types of learning and degrees of difficulty. The conclusions reached were that effects of the verbally expressed expectations on the performance of the retarded child on experimental tasks may be related to the sex of the child, and that meager evidence suggested that anxiety level may also be a related factor. Further investigations of the variables employing improved designs and procedures were encouraged. (AL)

ABSTRACT 12034

EC 01 2034 ED 003 087
Publ. Date 65 286p.
Lema, David E.
The Effect of Institutional Living on the Values of Mentally Handicapped, Delinquent, Adolescent Boys.
Syracuse University, New York, Research Institute
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-5-10-400
BR-5-8117

Descriptors: exceptional child research; mentally handicapped; delinquency; environmental influences; values; educable mentally handicapped; delinquent behavior; corrective institutions; institutional environment; Negro youth; comparative analysis; social values; males; adolescents; social relations

The social interaction in an institution was studied to determine its influence on value-belief preferences of members of a specific group. A sample of about 58 mentally handicapped, delinquent boys ranging in age from 12 to 16 years was selected. The selection was based on time in residence, intelligence scores, etiological classification, and socioeconomic level. Groupings were made for analysis as a total sample, and by institution, race, age, and time in residence. The instruments used to measure value-beliefs were the personal and impersonal values, ethical, moral, and social (VEMS). Results derived from analysis and comparisons showed that no significant differences were found in the value-beliefs of the subjects related to time in residence. The evidence also suggested that little emphasis is placed on teaching values in the institutions. Research is needed to generalize in specific aspects of the institutional environment. (RS)

ABSTRACT 20055

EC 02 0055 ED N.A.
Publ. Date Mar 65 314p.
Lloyd, Lyle L., Ed.; Frisina, D. Robert, Ed.
The Audiologic Assessment of the Mentally Retarded: Proceedings of a National Conference.
Parsons State Hospital And Training Center, Parsons, Kansas, Speech And Hearing Department;
Kansas University, Lawrence, Bureau Of Child Research
National Institute Of Mental Health (DHEW), Bethesda, Maryland
EDRS not available
MH-01127
Parsons State Hospital And Training Center, Speech And Hearing Department, 2601 Gabrielle Avenue, Parsons, Kansas 67357.

Descriptors: exceptional child research; mentally handicapped; tests; incidence; aurally handicapped; audiology; audiometric tests; auditory tests; auditory evaluation; evaluation techniques; audition (physiology); hearing loss; custodial mentally handicapped; educable mentally handicapped; hearing conservation; reinforcement; operant conditioning; stimulus behavior; electroencephalography

The proceedings contain 15 reviews and research reports on the audiologic assessment of mentally retarded children along with introductory material on the Parsons demonstration project in speech pathology and audiology and on the conference. The papers consider four general areas: conventional forms of audiologic assessment, behavioral observation audiometry, electrophysiologic assessment of hearing, and instrumental and operant conditioning in audiologic assessment. The specific concerns include the incidence of hearing loss among the mentally retarded, existing methods for assessing their hearing, presentation of new methods, and consideration of new techniques. A discussion and summary are also provided. Appendixes present the letter describing the conference plans and the application form, the conference program, and a summary of audiometric studies of mentally retarded subjects (1951 to the present). (GD)

ABSTRACT 20156

EC 02 0156 ED 031 822
Publ. Date Aug 66 136p.
Cratty, Bryant J.
Perceptual-Motor Attributes of Mentally Retarded Youth.
Mental Retardation Services Board Of Los Angeles County, California
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; perceptual motor coordination; testing; evaluation methods; trainable mentally handicapped; educable mentally handicapped; mongolism; body image; physical activities; predictive ability (testing); test reliability; sex differences; age differences; racial differences

To evaluate six perceptual-motor attributes of trainable and educable mentally retarded children, a battery of tests was constructed which included body perception, gross agility, balance, locomotor ability, throwing, and tracking; 83 retarded subjects provided reliability data, and their scores, with those of 120 additional subjects, provided normative data. The educable mentally retarded (EMR) and educationally handicapped (EH) groups were significantly superior in all tests to the trainable mentally retarded and Down's Syndrome groups, especially when vision and movement were paired. The Down's Syndrome group evidenced the most marked perceptual-motor deficiencies. EH children had poorer crawling and walking patterns than the EMR's, and these two groups functioned best during late childhood and early adolescence. Children with Down's Syndrome made continual improvement with increased age in tracking ability, gross agility, and in body-part perception. The majority of all subjects had difficulty making left-right identifications relative to their bodies. The correlation between IQ's and total battery scores (based on 37 IQ's) was .63 while the age to total score correlation was .54. (RJ)

ABSTRACT 20157

EC 02 0157 ED 031 823
Publ. Date 67 78p.
Cawley, John F.
Arithmetical Problem Solving: A Program Demonstration by Teachers of the Mentally Handicapped.
Connecticut University, Storrs, School Of Education
EDRS mf,hc
OEG-32-16-0270-5009
BR-5-0309

Descriptors: exceptional child research; mentally handicapped; mathematics; testing; teaching methods; educable mentally handicapped; item analysis; arithmetic curriculum; test construction; test reliability; test validity; intelligence factors; academic achievement

The purposes of the study were to investigate the effects of the combination of a trained teacher and a planned program on the problem solving abilities of mentally handicapped children, to develop measures of verbal problem solving (IDES) and arithmetic understanding (PUT), and to analyze the interrelationships among primary mental abilities and various combinations of achievement tests. A teacher training workshop presented for 10 evenings focused on the organization and use of 86 lessons in nine units for 18 weeks. Teacher methods concentrated on developing understanding through the solution of problems which originated in the classroom. Trained teachers used the prepared program with 161 retarded children; untrained teachers used the program with 58 retarded children; and there were 132 retarded and 89 average-ability controls. The results showed that the IDES and the PUT appear to be stable and consistent measures of the arithmetic performance of mentally handicapped children, and that the teacher training program and the prepared program of arithmetic curriculum were effective. Measures of primary mental abilities and academic achievement were highly interrelated. The study supports the contention that problem solving and concept development among the mentally handicapped can be influenced by education. (LE)

ABSTRACT 20163

EC 02 0163 ED 031 831
Publ. Date Feb 69 33p.
Calfee, Robert C.
Short-Term Retention in Normal and Retarded Children as a Function of Memory Load and List Structure.
Wisconsin University, Madison, Wisconsin Research And Development Center For Cognitive Learning
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-5-10-374 TR-75

Descriptors: exceptional child research; mentally handicapped; learning characteristics; recall (psychological); recognition; memory; research reviews (publications); retention; age differences; intelligence differences; cognitive processes

Studies of recall and recognition short-term memory (STM) were reviewed, and a series of studies of serial recognition memory of normal and retarded children was described. In experiments using a recall procedure there were decrements in initial performance level with decreasing age and IQ but less evidence that forgetting occurred at a faster rate in younger and less intelligent children. Recognition memory was found to be relatively constant over a wide range of age and IQ. Evidence was presented that ability to encode and organize stimulus material depended on age and IQ. Retarded children were especially poor at adopting efficient encoding strategies and seemed relatively incapable of making use of the organizational structure of a list to facilitate storage and recall. Detailed analyses showed considerable response bias in children's recognition behavior, consistent primacy and recency effects when bias was taken into account, and evidence that memory for individual items was not all-or-none. Except for response biases and forgetting rate, recognition memory processes of normal and retarded children appeared to be identical to those of adults. (Author/RJ)

ABSTRACT 20181

EC 02 0181 ED 031 849
Publ. Date 69 39p.
Levine, S. Joseph
Empirical Study of Instructional Materials Evaluation in Special Education.
Michigan State University, East Lansing, Regional Instructional Materials Center For Handicapped Children And Youth
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; instructional materials; evaluation criteria; teacher role; evaluation methods; records (forms); mentally handicapped; educable mentally handicapped; equipment evaluation

To investigate the potentialities of teachers as evaluators of instructional materials and to develop an inclusive form to cover all of the necessary evaluative aspects of a material and its use, 16 teachers of the educable retarded participated in an institute. Four member teams played a game in which they studied materials and identified evaluative criteria. An evaluation form was devised, used at the institute and in the classroom, and revised. Checklists were largely eliminated and space left for the evaluator to enter pertinent information. Conclusions were that given the structuring and motivation of a game-like atmosphere, teachers can provide a set of criteria meaningful to them; there seemed to be a good deal of agreement on the criteria; and a teacher developed instrument can be effectively used. Directions for playing the game, charts of the development of the criteria, the evaluation forms, an evaluator's guide, and a sheet for evaluating the evaluations are provided. (RJ)

ABSTRACT 20186

EC 02 0186 ED 031 854
Publ. Date May 69 19p.
Gruen, Gerald E.; O'Donnell, Sheila A.
Success and Failure as Determinants of Goal-Setting Behavior in Mentally Retarded and Normal Children, Final Report.
Purdue University, Lafayette, Indiana, Department Of Psychology
Office Of Education (DHEW), Washington, D. C.; Bureau Of Research
EDRS mf,hc
OEG-0-9-070213-3699
BR-7-E-213

Descriptors: exceptional child research; mentally handicapped; goal orientation; reinforcement; task performance; success factors; failure factors; prediction; educable mentally handicapped; self concept; special classes

To test the hypothesis that experimentally-induced success and failure experiences would differentially affect mentally retarded and normal children, 24 educable mentally retarded children and their matched mental age (MA) and chronological age (CA) controls were given six trials on a verbal 5-item vocabulary task. The subjects (Ss) were given, in counter-balanced design, three success trials (simple words) and three failure trials (difficult words). All Ss gave a prediction of performance estimate for each trial. The retarded Ss and their MA controls set higher estimates across trials than the older CA controls. The retarded Ss also set higher initial estimates. Results were interpreted as being contrary to the hypothesis that retardates have had a greater history of

failure experiences resulting in lower generalized expectancy of success. (Author/RJ)

ABSTRACT 20198

EC 02 0198 ED 031 866
Publ. Date 31 Mar 69 75p.
Sommers, Ronald K.
Factors in the Effectiveness of Articulation Therapy with Educable Retarded Children. Final Report.
Montgomery County Schools, Norristown, Pennslyvania
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEC-1-7-07342-3544
BR-7-0432

Descriptors: exceptional child research; mentally handicapped; articulation (speech); speech therapy; speech handicapped; educable mentally handicapped; speech evaluation; speech tests; speech improvement

To determine the effectiveness of group articulation therapy, 180 educable retarded children in special classes (average age 9, average IQ 70), all of whom had articulation problems, were rated on the Carter/Buck Prognostic Speech Test and a picture version of McDonald's deep test of articulation. Subjects were then randomly assigned to one of three groups: no therapy, therapy for 30 minutes once a week for 9 months, or therapy for 30 minutes four times weekly for 9 months. Posttests were administered immediately after 9 months and again 3 months later. Results on the picture deep test indicated that subjects who received therapy four times weekly improved significantly, whereas subjects who had therapy once a week did not. On the picture articulation test, however, no significant differences were found between experimental groups. At the time of the second posttesting, the picture articulation improvements by the subjects who had therapy four times weekly were maintained as were the respective positions of subjects in the three groups. Significant relationships were also found between mental age and IQ and articulation improvement during therapy. (JD) (not available in hardcopy due to marginal legibility of original document.)

ABSTRACT 20490

EC 02 0490 ED 032 683
Publ. Date Jul 69 57p.
Bulgarella, Rosaria A.
Facilitation of Cognitive Development Among Children with Learning Deficits; The Inducement of Number Readiness in Retardates: Study I, Conservation Training. Interim Report.
Michigan State University, East Lansing
Office Of Education (DHEW), Washington, D. C., National Center For Education Research And Development
EDRS mf,hc
OEG-0-8-080054-2694 (032)
BR-8-0054

Descriptors: exceptional child research; mentally handicapped; conservation (concept); training; cognitive development; concept formation; educable mentally handicapped; transfer of training; testing; intelligence level; learning processes

Fifty educable retarded children who were determined to be nonconservers by means of three conservation pretests (discontinuous quantity, correspondence, and continuous quantity) were randomly assigned to one of five treatment groups (discontinuous quantity training, correspondence training, continuous quantity training, control, and control language groups). The four hypotheses were as follow: it is possible to train retardates to conserve quantity; one form of conservation training transfers to other forms of conservation; performance on conservation tests is related to mental age; and discontinuous quantity conservation appears before continuous quantity conservation. In general, the results of the posttests were consistent with the four hypotheses. Testing and training procedures are appended. (Author)

ABSTRACT 20592

EC 02 0592 ED 011 804
Publ. Date Dec 66 47p.
An Interdisciplinary Approach in the Identification of Mentally Retarded Indian Children. Addendum.
Bureau Of Indian Affairs, Washington, D. C., Division Of Education
EDRS mf,hc

Descriptors: exceptional child research; tests; identification; teaching methods; mentally handicapped; pilot projects; teacher aides; class activities; American Indians; psychological testing; rural environment; medical case histories; English (second language); aptitude tests; small group instruction; teacher supervision; instructional programs; language ability; Navajo; intellectual development; educationally disadvantaged; clinical diagnosis; referral; screening tests; individual characteristics; program administration; Arizona; Teec Nos Pos

A pilot project in which 47 mentally handicapped Navajo children were enrolled in special classes is described. These children were selected from boarding schools by use of a teacher referral form. The project was divided into five phases: screening of children to determine those who were mentally retarded, preparing individual behavioral profiles on each of the selected children, medical and paramedical examining of the referral group, staffing the children to determine the nature of handicapping conditions, and teacher supervision, special class organizing, and the instructional program. Particular emphasis is given to descriptions of the use and results of psychological tests used in the project. A discussion of teaching English as a second language to Navajo children is included in an attached appendix. (ES)

ABSTRACT 20593

EC 02 0593 ED 015 561
Publ. Date Aug 63 44p.
Karnes, Merle B. And Others
The Effects of Typing Instruction on the Personality and Achievement of Educable Mentally Handicapped Children.
Champaign Community Unit 4 School District, Illinois
EDRS mf,hc

Descriptors: mentally handicapped; exceptional child research; achievement; personality; academic achievement; educable mentally handicapped; emotional adjustment; eye hand coordination; personality development; reinforcement; skill development; social adjustment; transfer of training; typewriting; visualization; visual learning

To study whether teaching typing to educable mentally handicapped students would result in improved academic work, greater visualization skills, and better social-emotional adjustment, half of 14 matched pairs of children (10 to 13 years old, IQ's between 50 and 80) were given 2 to 3 years of typing instruction. Twelve tests were given to all subjects before and after the experimental period to measure educational achievement, personality and social development, visual motor abilities, and auditory abilities. Only two of the seven measures of academic achievement significantly favored the experimental group (p equals .05). The differences in visualization skills between the two groups did not approach significance (p equals .05), and this hypothesis was rejected. Only two out of the seven tests of social-emotional adjustment significantly favored the experimental group (p equals .05). The major implications are that transfer of learning from the use of the typewriter to other skills must be taught, and that some students showed potential for acquiring typing as a salable skill. Suggestions for further study are included. (RS)

ABSTRACT 20628

EC 02 0628 ED 002 791
Publ. Date 60 588p.
Fliegler, Louis A.; Hebeler, Jean
A Study of the Structure of Attitudes of Parents of Educable Mentally Retarded Children and a Study of a Change in Attitude Structure. Volume I.
Syracuse University, New York, New York Research Institute
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-SAE-6408 CRP-018-VOL.1

Descriptors: exceptional child research; mentally handicapped; counseling; attitudes; family (sociological unit); educable mentally handicapped; parent attitudes; counseling programs; personality change; child rearing; changing attitudes; group counseling; parent counseling; personal adjustment

The attitudes of parents of educable mentally retarded children were studied, and the effectiveness of altering parental attitudes through time sequences of counseling was assessed. The project studied 60 fathers and 60 mothers who

were divided into four groups, each group consisting of 15 fathers and 15 mothers. One group received intensive counseling for 1 week, one group participated in counseling once a month for 3 months, and one group participated in counseling for 6 months. The attitudes of parents involved in the study were measured by attitude tests, interviews, and personality tests administered before and after group sessions. Positive patterns of child rearing were found and parents tended to be more adjusted to the handicap and to educational goals than to community or neighborhood reaction to the child. Counseling seemed to have the effect of liberalizing attitudes toward retardation and personal adjustment. The longer the counseling period the more ideas on the general subject changed while short periods brought more changes on specific points. Although results showed great variability conclusions were that counseling has a selected effect on the attitudes and personality structure of parents and that group counseling can be beneficial. (JL)

ABSTRACT 20684

EC 02 0684 ED N.A.
Publ. Date 67 239p.
Anderson, John A., Ed.; Swaiman, Kenneth F., Ed.
Phenylketonuria and Allied Metabolic Diseases Conference (Washington, D.C., April 6-8 1966).
Minnesota University, Minneapolis, Department Of Pediatrics
Social And Rehabilitation Service (DHEW), Washington, D. C., Children's Bureau
EDRS not available
Superintendent Of Documents, U. S. Government Printing Office, Washington, D. C. 20402 ($1.50).

Descriptors: exceptional child research; mentally handicapped; metabolism; screening tests; identification; medical evaluation; medical treatment; medical case histories; infants; biochemistry; chromatography; government role; etiology; medical research; dietetics; Phenylketonuria

Papers are concerned with the primary enzymatic defect in Phenylketonuria (PKU) and how it may influence the central nervous system, amine metabolism in PKU, induced PKU in experimental animals (opportunities and limitations), the overall view of biochemical knowledge of PKU, screening tests for the detection of PKU (homozygotes and heterozygotes) large scale screening for metabolic disease in the newborn in Great Britain, suitable and preferred methods of chromatography for the study of urine and blood in inborn errors of metabolism, and protein, phenylalanine, and tyrosine requirements of the premature and newborn infant. Also discussed are the methods and problems of administration of the low phenylalanine diet (guides to biochemical and dietary control), a critical assessment of the dietary treatment of PKU experiences with 45 cases, observations of PKU, a PKU psychological and development evaluation, a case finding of PKU as a public health approach, and public health laboratory screening programs. Also included are the following topics: organization of community services, the role of government and legislation in management of problems in medicine, the implications of the drive for screening, membrane transport functions and their relation to PKU, inhibition of phenylalanine hydroxylase in liver, unanswered questions in the primary metabolic block in PKU, neuropathology and abnormalities of lipid metabolism, and amino acid and protein metabolism in the developing brain. (LE)

ABSTRACT 20802

EC 02 0802 ED N.A.
Publ. Date 58 442p.
Masland, Richard L. And Others
Mental Subnormality; Biological, Psychological, and Cultural Factors.
National Association For Retarded Children, New York, New York
EDRS not available
Basic Books, Inc., Publishers, 404 Park Avenue South, New York, New York 10016 ($3.95).

Descriptors: exceptional child research; mentally handicapped; etiology; biological influences; prenatal influences; psychological characteristics; cultural factors; environmental influences; prevention; incidence; heredity; intelligence tests; academic achievement; socioeconomic influences; ethnic origins; language development; sex (characteristics)

Two research programs examine the biological, psychological, and cultural causes of mental subnormality. The prevention of mental subnormality is presented in terms of such biological factors as those significant in the prenatal, perinatal, and postnatal stages of development, and those concerned with regeneration of the central nervous system. Pathological studies and surveys for incidence are also provided. The information on psychological and cultural factors includes problem solving behavior in non-test situations, cultural background factors affecting test performance, conceptualizing the structure of intellect, heredity and environmental factors, intelligence and cultural factors, and descriptions of both the severely defective individual and the higher grades of mental defect. Recommendations for research and a list of references are presented. (RD)

ABSTRACT 20805

EC 02 0805 ED N.A.
Publ. Date May 68 51p.
Tom, Brenda
Developing a Materials-Centered Science Program for Educable Mentally Retarded Children.
Hawaii University, Honolulu, Department Of Education
EDRS not available
Department Of Education, University Of Hawaii, 1801 University Avenue, Honolulu, Hawaii 96822.

Descriptors: exceptional child research; mentally handicapped; sciences; instructional materials; special classes; educable mentally handicapped; abstract reasoning; logical thinking; thought processes; cognitive processes; science curriculum; curriculum evaluation; Science Curriculum Improvement Study

Forty-two educable mentally handicapped children, including one younger and one older group (7 to 10 and 9 to 13 respectively), were given the material objects unit of the Science Curriculum Improvement Study. Test results indicated that experimentals and controls differed significantly on posttests but not on pretests in ability to group some objects, that the younger experimental showed the greatest change in such ability, and that the differences between experimentals and controls were significant. However, the greater number of groupings by all subjects on posttests suggested that a practice and maturational effect might also have been a factor. It was concluded that the unit developed new concepts and perhaps also helped children to recognize and verbalize subconscious concepts. (LE)

ABSTRACT 20806

EC 02 0806 ED N.A.
Publ. Date 58 216p.
Kirk, Samuel A.
Early Education of the Mentally Retarded.
EDRS not available
University Of Illinois Press, Urbana, Illinois 61801 ($6.00).

Descriptors: exceptional child research; mentally handicapped; preschool children; environmental influences; educable mentally handicapped; foster family; preschool programs; disadvantaged youth; etiology; intellectual development; social development; case studies (education); institutionalized (persons); early childhood education; family influence; evaluation techniques; family background

To provide factual data for or against the general contention that special educational provisions at a young age can alter the rate of development of mentally retarded children, 81 children between the ages of 3 and 6, with IQ's between 45 and 80, were studied for 3 to 5 years. The children were divided into four groups: the community preschool group; community contrast (did not attend preschool) group; institution preschool group; and institution contrast (did not attend preschool) group. Case studies of the experimental children and statistical comparisons of the preschool and contrast groups indicated that 70% of the children who received preschool training showed an acceleration in rates of growth and retained that level during the follow up period. The over all IQ and Social Quotient (SQ) increases of the preschool groups beyond those of the contrast groups on the Binet, Kuhlmann, and Vineland Scales were all significant beyond the .05 level. Children living in psycho-socially deprived

homes who did not attend preschool tended to remain at the same rate of development or to drop to lower levels. Both community and institutional preschool groups increased about 10 points in IQ and SQ during the preschool period. The community contrast group children generally retained their original IQ's and SQ's but the IQ and SQ of the institution contrast group tended to drop during the preschool period. Case histories are included. (LE)

ABSTRACT 20820

EC 02 0820 ED 032 686
Publ. Date Apr 69 60p.
Stinnett, Ray D.; Prehm, Herbert J.

Learning and Retention: A Comparison of Three Methodologies with Mentally Retarded and Normal Children.

Illinois University, Springfield
Office Of Education (DHEW), Washington, D. C., National Center For Educational Research And Development
EDRS mf,hc
OEG-9-8-071103-0115(010)
BR-7-I-103

Descriptors: exceptional child research; mentally handicapped; learning; educational methods; rote learning; retention; educable mentally handicapped; recall (psychological); paired associate learning; learning processes; intelligence differences; learning characteristics

Rote learning and retention performance was studied as a function of method used in original learning and as a function of intellectual level. Sixty educable mentally retarded and 60 mentally normal junior high school students were randomly selected and assigned to one of three treatment groups, each learning to a different criterion, for each intellectual category in order to learn a paired associate task. Retention was assessed by immediate recall scores, 24 hour recall scores, and relearning scores following the 24 hour interval. A 2x3 complete factorial analysis of covariance was performed for the following dependent variables: original learning; relearning; and 24 hour recall. Immediate recall was assessed utilizing a 2x3 complete analysis of the variance procedure. The results of the investigation indicated inferior learning performance and a 24 hour retention deficit for retarded subjects and amelioration by overlearning of retention deficits in the retarded subjects. In addition, the results in the area of rote learning and retention comparing mentally retarded and normal subjects were found to be method dependent. (Author/JD)

ABSTRACT 20834

EC 02 0834 ED 032 701
Publ. Date 69 13p.
Levitt, Edith

The Effect of Context on the Reading of MR and Normal Children at the First Grade Level.

Columbia University, New York, Research And Demonstration Center For The Education Of Handicapped Children
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
RR-5

Descriptors: exceptional child research; mentally handicapped; context clues; word recognition; reading; reading ability; reading skills

To study the effects of context on the performance of children reading at first grade level, 26 retarded and 24 normal children were tested. Subjects read words printed individually on separate pages; they also read the word in the context of a sentence. Results indicated that provision of a context produced significant improvement in the reading performance of both groups, but the hypotheses that word recognition by context would be significantly greater for the normal subjects was not supported. Reasons for the failure of this hypothesis are given; the need to help retardates make the most effective use of context clues is expressed. (RJ)

ABSTRACT 20874

EC 02 0874 ED 028 570
Publ. Date 69 65p.
Sunderlin, Sylvia, Ed.; Wills, Brooke, Ed.

Nutrition and Intellectual Growth in Children.

Association For Childhood Education International, Washington, D. C.
EDRS not available
BULL-25-A
Association For Childhood Education International, 3615 Wisconsin Avenue, N. W., Washington, D. C. 20016 ($1.25).

Descriptors: exceptional child research; disadvantaged youth; nutrition; child development; intellectual development; educational needs; health; food; economic disadvantagement; incidence; diseases; poverty programs; foreign countries; school programs; federal aid; government role; biochemistry; infants; dietetics; mothers; mentally handicapped; mental retardation

A consideration of nutrition and intellectual growth opens with a glossary of 12 terms and two reports on hunger in America, one by J.L. Frost and B.L. Payne, the other by the Citizens' Board of Inquiry into Hunger and Malnutrition. Included are articles on nutrition and intellectual development in children, by M. Winick; maternal diet, growth, and behavior, by M. Simonson and B.F. Chow; international nutrition and later learning, by M.C. Latham; and medical care of children in Poland, as told to H.T. Suchara. Also, D. Rosenfield and F.J. Stare discuss nutritional prospects for the future; M.L. Cronan describes the role of the school in providing for nutrition; and M.J. Brennan treats conservation, resources, and education. (JD)

ABSTRACT 20900

EC 02 0900 ED 016 340
Publ. Date Aug 67 72p.
Levy, Irwin S.

The Effect of Age as a Variable on the Scores of the Harris-Goodenough Drawing Test of Educable Retardates.

North Carolina University, Chapel Hill
EDRS mf,hc
OEG-2-6-068739-1751
BR-6-8739

Descriptors: exceptional child research; tests; mentally handicapped; adolescents; educable mentally handicapped; test reliability; intelligence tests; group intelligence tests; age differences; age; standardized tests

In order to determine the reliability of performance of retarded adolescents on the Harris Revision of the Goodenough Draw-A-Man Test (DAM) and whether the decline in performance which occurs in normal adloescents at the mid-teens also occurs with retarded adolescents, 213 male and 130 female subjects, aged 11 to 20 years and with IQ's of 56-72, in intermediate and secondary classes for the educable mentally handicapped (EMH) in North Carolina were tested. The DAM was administered in group form to all the subjects in their own classrooms. It was readministered after 7 months. Overall mean change for the 343 subjects between test and retest was singificant (p less than .05). Analysis of variance produced significant F-Ratios showing that standard deviations of the change differed at various chronological age groups for the males. Results indicated that the test-retest reliability was significant (p less than .01). The test is useful with EMH females to age 16 and with EMH males to age 20 years. Although the maximum chronological age divisor of 15 was established by the maximum chronological age divisor of 15 was established by Harris, the intrascorer reliability coefficient after 6 weeks was .99. In conclusion, the DAM test as a measure of concrete concept formation seems to be a reliable instrument for gaining information about mildly mentally handicapped adolescents. Twenty-five references and 19 tables are included. (DT)

ABSTRACT 21032

EC 02 1032 ED 033 484
Publ. Date 69 242p.
Budoff, M.

An Educational Test of the Learning Potential Hypothesis with Adolescent Mentally Retarded Special Class Children, Volume I. Final Report.

Cambridge Mental Health Center, Massachusetts
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf
OEG-32-31-0000-6019
BR-6-1184
Cambridge Mental Health Center, 20 Sacramento Street, Cambridge, Massachusetts 02138.

Descriptors: exceptional child research; mentally handicapped; teaching methods; academic achievement; instructional materials; educable mentally handicapped; manipulative materials; junior high school students; nonverbal ability;

electricity; nonverbal learning; ability; sciences; student evaluation; evaluation methods; average students

To test the hypothesis that the amount learned from a manipulative, nonverbal oriented unit on electricity would be better predicted by a learning potential assessment procedure than from an IQ based classification (educable mentally retarded status), an EMR group and a regular class non EMR group were both exposed to the unit; untaught EMRs served as controls. Students were assessed on pretests; students who were high scorers or gainers were considered to have strong learning potential. Results showed that both taught groups knew more about electricity after the unit than before, and that EMR gainers and highscorers learned more than nongainers. A second study showed no difference in amount learned between the unit and a lecture-demonstrati9n unit. Conclusions were as follow: certain EMR's are very capable when taught by nonverbal material; high scorers in the EMR range and low achieving regular class children may require novel presentations that will minimize effects of poor literacy skills; and EMR high scorers might do better in a regular class if curriculum changes were made to compensate for their reading deficits or if they were given extensive work in reading. The manipulative, nonverbal unit, a teacher's guide for the unit, and the lecture demonstration unit are available in EC 004 359. (Not available in hard copy due to marginal legibility of original document.) (Author/RJ)

ABSTRACT 21257

EC 02 1257 ED 002 769
Publ. Date 57 158p.
Cruickshank William M.; Blake, Kathryn A.
A Comparative Study of the Performance of Mentally Handicapped and Intellectually Normal Boys on Selected Tasks Involving Learning and Transfer, December 1, 1956-November 30, 1967.
Syracuse University, New York, Research Institute
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-SAE-6414 CRP-127

Descriptors: exceptional child research; tests; achievement; mentally handicapped; learning; educable mentally handicapped; transfer of training; average students; institutional schools; comparative testing; achievement tests; intelligence tests; task performance

The study evaluated the responses of educable mentally retarded and intellectually normal children of similar mental ages to tasks involving certain aspects of learning and transfer of that learning. The hypothesis tested was that differences in achievement and intelligence test performances would be related to differences in the progress in learning and transfer. Thirty endogenously mentally retarded boys within the IQ range of 50 to 75 and 30 boys within a normal IQ range of 100 to 115 were matched individually on the basis of Binet Mental Age (8 through 10 years). In addition to being given individual IQ tests, each subject was screened for academic achievement and for adequate vision and hearing. The significance of any differences between the groups in mental age was evaluated by means of the t-test. A series of tests, including such items as card sorting and paired associates, furnished data for the study in evaluating performances of the subjects. (GC)

ABSTRACT 21273

EC 02 1273 ED 003 817
Publ. Date 63 231p.
Stolurow, Lawrence M.
Principles for Programing Learning Materials in Self-Instructional Devices for Mentally-Retarded Children. Final Report.
Illinois University, Urbana
EDRS mf,hc
CRP-661

Descriptors: exceptional child research; programed instruction; mentally handicapped; instructional materials; teaching methods; recognition; recall (psychological); stimulus behavior; sight vocabulary; vocabulary development; student ability; verbal ability; programed materials; educable mentally handicapped; autoinstructional aids; teaching machines

Principles for programing instructional materials for teaching mental retardates were developed from concepts derived from a theory previously developed by the author. The theory placed emphasis on the cueing function in the stimulus control of behavior. Relevant sections of the theory and related research were described. Separate experiments were conducted for grouping and spacing of frames with common stimulus elements, recognition and recall, under stimulus control, sequencing complex associative paradigms to be taught in both a forward and backward direction; prompting versus confirmation sequences and overlearning in the automated teaching of sight vocabulary; prompting, confirmation, and vanishing in the automated teaching of a sight vocabulary; and applying a computer prepared program for automated frame writing. Some of the findings were as follow: optimum sequence of material for the learner could be contingent upon his aptitudes or abilities, explicit rules for generating programs could be built into the programing used by the computer in writing frames, use of a prompting stimulus-response (S-R) sequence produced more rapid learning than use of a confirmation S-R sequence, and a computer-prepared program to generate instructional materials appeared successful in producing a change in the subject's ability to express himself. (RS)

ABSTRACT 21494

EC 02 1494 ED 034 372
Publ. Date Aug 69 14p.
MacKinnon, Ronald C.; Elliott, Charles
A Comparison of an Achievement Battery with Two Tests of Ability with Educable Mental Retardates. Final Report.
Florida State University, Tallahassee
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf,hc
OEG-0-9-19061-0774(032)

Descriptors: exceptional child research; mentally handicapped; test validity; aptitude tests; comparative testing; achievement tests; testing problems; intelligence tests; educable mentally handicapped; correlation; testing; group tests; individual tests

To find the concurrent validity of two scholastic aptitude tests when a scholastic achievement test was used as a criterion for use in placement of mentally retarded children, 127 subjects were involved. The California Achievement Test (CAT) was used as a criterion measure, and the Primary Mental Abilities Test (PMA) and the Slosson Intelligence Test (SIT) were used to determine the correlation of the scores with the criterion measure. The results indicated correlations of .68 between the PMA and the CAT and .62 between the SIT and the CAT. The intercorrelation of the PMA and SIT was .67. Ability subtests were analyzed to determine their correlations to the criterion. The conclusion was that when six or more children are to be tested, less time is needed and no concurrent validity is lost by using the PMA rather than the individual test, the SIT. Tables of results are included. (Author/JM)

ABSTRACT 21742

EC 02 1742 ED 035 121
Publ. Date Mar 69 76p.
Warner, Dennis A.; De Jung, John E.
Goal Setting Behavior as an Independent Variable Related to the Performance of Educable Mentally Retarded Male Adolescents on Educational Tasks of Varying Difficulty. Final Report.
Washington State University, Pullman
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; goal orientation; motivation; feedback; spelling; educable mentally handicapped; adolescents; males; institutionalized (persons); aspiration; task performance; testing

To investigate the effects of goal setting upon the spelling performance of educable mentally retarded male adolescents, comparisons were made between institutionalized and non-institutionalized subjects on the effects of goal setting and of task difficulty upon performance. A pilot study developed appropriate educational tasks for use in later testing with standardization of instructions and experimental procedures. Forty institutionalized and 40 special education educable mentally retarded male adolescents, randomly selected from among

the 93 pilot study subjects, were assigned to one of the following four treatment groups: easy task-knowledge of past performance plus statement of goal, hard task-knowledge of past performance plus statement of goal, easy task-knowledge of past performance only, and hard task-knowledge of past performance only. The 80 subjects were tested alone on the spelling tasks by a single experimenter. Results indicated that higher scores were associated with goal setting than with feedback information only, and that higher scores were associated with the easy task rather than with the hard task. The expectation that goal setting would be superior to non-goal setting in terms of performance on a hard task but not on an easy task was upheld for the public school sub-sample but not for the institutionalized sub-sample. (Author/LE)

ABSTRACT 22140

EC 02 2140 ED 025 434
Publ. Date 68 157p.
Connoly, Austin Jay
An Instrument of Measurement to Appraise the Arithmetic Abilities of Educable Mentally Retarded Children Ages Thirteen Through Sixteen.
Colorado State College, Greeley
EDRS not available
University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 68-14, 719, Microfilm $3.00, Xerography $7.40).

Descriptors: exceptional child research; mentally handicapped; measurement instruments; arithmetic; academic achievement; test construction; test reliability; educable mentally handicapped

The study was concerned with the development of a consistent and reliable arithmetic achievement test to assess the arithmetic ability of educable mentally retarded youngsters ranging in age from thirteen through sixteen. The instrument so constructed is intended to be administered individually, and it requires the subject to do little reading or writing. The reliability of the instrument was analyzed with the test-retest and split-half methods. The test-retest method yielded a reliability coefficient (Pearson Product-Moment) of .968 with a Standard Error of Measurement of 3.762. The split-half method produced a Pearson r of .972 with a Standard Error of Measurement of 1.593. Both of the reliability coefficients were significant at the one per cent level. (RP)

ABSTRACT 22211

EC 02 2211 ED 037 863
Publ. Date Oct 69 44p.
Portal-Foster, C. W.
Mental Retardation in a Canadian Province.
Canadian Welfare Council, Ottawa, Ontario
Department Of National Health And Welfare, Government Of Canada, Ottawa, Ontario.
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; incidence; data collection; sampling; research methodology; tests; questionnaires; interviews; surveys; research problems; researchers; publicize; Prince Edward Island (Canada)

The fourth of a series of reports on the study, Mental Retardation in a Canadian Province, the document covers the initial months of field data gathering in Prince Edward Island, April to September 1969. The major objectives of the study, to describe and explore the most suitable definition of retardation for Canadian population and report on the prevalence of mental retardation in a geographically defined population, are stated and further broken down into null hypotheses. Problems involved in selecting the sample population and data on the final sample, the battery of instruments administered, staff selection and training, the interview process, and the use of publicity to introduce and support the project are described. Professional interest in the study is mentioned with the conclusion that the study can fill an important research void. (RJ)

ABSTRACT 22212

EC 02 2212 ED 037 864
Publ. Date 69 19p.
Bilsky, Linda; Evans, Ross A.
The Use of the Associative Clustering Technique in the Study of Reading Disability: Effects of List Organization.
Columbia University, New York, New York, Teachers College
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
RR-4

Descriptors: exceptional child research; mentally handicapped; reading difficulty; retention; cluster grouping; cognitive processes; reading comprehension; reading processes; learning processes; learning disabilities

To explore the possibility that the tendency to cluster during free recall reflects organizational processes that are central to the attainment of certain reading skills, 32 mentally handicapped subjects were asked to recall 20 words from four conceptual categories on four consecutive trials. For one group the words were presented in random order on all four trials. For thr second group, the words were presented in categories on two trials and randomly on two trials. The subjects in each group were further divided into above and below median reading comprehension subgroups. The major findings were that organized word presentation increased clustering on subsequent nonorganized trials, and that the above median reading comprehension group clustered significantly more than the below median group. (Author)

ABSTRACT 22213

EC 02 2213 ED 037 865
Publ. Date 69 17p.
Evans, Ross A.
The Use of the Associative Clustering Technique in the Study of Reading Disability: Effects of Presentation Mode.
Columbia University, New York, New York, Teachers College
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
RR-3

Descriptors: exceptional child research; mentally handicapped; cluster grouping; retention; reading difficulty; reading processes; cognitive processes; learning processes; visual stimuli; verbal stimuli; reading level; teaching methods; recall (psychological)

The study investigated the effects of reading level and stimulus presentation mode on the associative clustering and recall performance of mentally retarded adolescents. The subjects were administered a randomized list of twenty words from four conceptual categories. For each of four trials, these words were presented via the auditory, visual or combined auditory-visual modes. The subjects in each condition were divided at the median on the basis of reading grade levels. The major findings of the study were that bimodal presentation had a significant facilitating effect on recall but not on clustering. Reading level was not significantly related to either recall or clustering. (Author)

ABSTRACT 22229

EC 02 2229 ED 037 881
Publ. Date Feb 69 186p.
A Study of Education Programs in Minnesota's Institutions for the Mentally Retarded.
Minnesota National Laboratory, St. Paul;
Minnesota State Department Of Education, St. Paul
Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; institutionalized (persons); educational programs; residential schools; interagency cooperation; financial support; administration; educational needs; state surveys; program evaluation; Minnesota

To identify learning program needs and to make recommendations for quality control and expansion of programs for the mentally handicapped in institutions, four facilities were studied. Detailed questionnaires and visitations were used to obtain the information. The major findings were that learning programs in Minnesota State Institutions are operating at minimum levels in terms of daily support and in numbers of residents served, and that there exists a basic inability to give meaningful learning experiences to most institutionalized persons. Recommendations include broader and more flexible funding, closer involvement of the State Department of Education and local school districts, and the establishment of closer ties between institutional programs and the

local educational agency in administration, supervision, and funding. Descriptions of the existing programs, extensive recommendations for the future, and appendixes presenting findings of data are provided. (JM)

ABSTRACT 22517

EC 02 2517 ED 038 787
Publ. Date Apr 69 80p.
Portal-Foster, C. W. And Others
Mental Retardation in a Canadian Province: A Research Proposal. Report Number 3.
Candadian Welfare Council, Ottawa (Ontario), Research Branch
Government Of Canada, Ottawa (Ontario), Department Of National Health And Welfare
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; incidence; research design; statistical surveys; pilot projects; research methodology; sampling; cultural disadvantagement; social disadvantagement; family relationship; community attitudes; family attitudes; field studies; evaluation methods; demography; etiology; Canada; Prince Edward Island

The proposed research design, to be actualized beginning in 1969, was evolved to determine the nature and prevalence of mental retardation in Canada and to relate them to other variables. Issues raised concerning both nature and prevalence were reviewed as were surveys in seven different geographic areas. A pilot study conducted in two small villages on Prince Edward Island produced an operational index of mental retardation and a research instrument including enumeration data, measures of intellectual and social competence, case histories, observation, and personality and attitudinal variables. Sampling procedures and field work plans were set; scoring, coding, and statistical facilities and techniques were fixed. (JD)

ABSTRACT 22618

EC 02 2618 ED N.A.
Publ. Date 65 137p.
Meuller, Max W.
A Comparison of the Empirical Validity of Six Tests of Ability with Educable Mental Retardates.
George Peabody College For Teachers, Nashville, Tennessee
EDRS not available
OEC-4-10-199 CRP-S-059
Publications Department, George Peabody College For Teachers, 21st Avenue South, Nashville, Tennessee 37203.

Descriptors: exceptional child research; mentally handicapped; tests; cognitive processes; educable mentally handicapped; test validity; intelligence tests; predictive ability (testing); verbal tests; visual measures; cognitive measurement; predictive validity; Stanford Binet; Illinois Test of Psycholinguistic Abilities; Peabody Picture Vocabulary Test; Pictorial Test of Intelligence; Colored Progressive Matrices; Primary Mental Abilities Test

The validity of intelligence and other tests used in the diagnosis of retarded children was investigated. Experimental samples consisted of 101 children selected from special classes for educable mentally retarded whose ages ranged from 6.9 to 10 years and whose IQ scores ranged from 50 to 80. Tests evaluated were the Stanford-Binet, Illinois Test of Psycholinguistic Abilities (ITPA), Peabody Picture Vocabulary Test (PPVT), Pictorial Test of Intelligence (PTI), Colored Progressive Matrices (CPM), and Primary Mental Abilities Test (PMAT). These tests were administered to the group with various learning ability tasks. Statistical analysis showed that the PMAT, Stanford-Binet, PTI, and the ITPA were valid, while the other two were less valid. The use of a combination of one group test and one individual test was supported; but the CPM and the PPVT were found not to be adequate substitutes for more comprehensive instruments that predict learning ability at an early age. (RS)

ABSTRACT 22736

EC 02 2736 ED 039 678
Publ. Date Nov 69 73p.
Copple, C. Rockne And Others
Habilitation of Rural Educable Mentally Retarded Adolescents: A Handbook for Educators.
Eastern Montana College, Billings
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-0-9-362020-0790(032)
BR-36-2020

Descriptors: exceptional child research; mentally handicapped; rural education; educational needs; educational programs; educable mentally handicapped; individual characteristics; vocational education; parent attitudes; administrator attitudes; counselor attitudes; student attitudes; consultants; cocurricular activities; individual development; Montana

A study was made of 20 rural high schools with enrollments of less than 110 and with an educable mentally handicapped student currently enrolled. Administrators, counselors, the educable students, and their parents were interviewed to determine provisions made for these students. In addition, the interviewers were concerned with what these people thought could be included in the school curriculum. These current and conceivable practices were submitted to six special education experts who rated them as to suitability. Each of the experts in turn composed a list of suggested practices in the areas of intellectual, social, emotional, moral, physical, and occupational development. These lists were submitted to parents who rated them on the basis of feasibility. (Author)

ABSTRACT 22739

EC 02 2739 ED 039 681
Publ. Date Jan 70 88p.
Feffer, Melvin
Role-Taking Behavior in the Mentally Retarded.
Yeshiva University, New York, New York
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf,hc
OEG-0-9-422029-0716(032)
BR-42-2029

Descriptors: exceptional child research; mentally handicapped; role playing; projective tests; behavior development; educable mentally handicapped; intelligence differences; cognitive development; social development; interpersonal relationship; test construction; Role Taking Task

A projective role taking task (RTT) was revised with respect to procedure and scoring categories for use with the mentally retarded. The revised RTT was administered to 123 educables. Results indicated significant associations between mental age and various indices of the retardates' role taking behavior. These associations remained significant when chronological age was controlled. Also, both interjudge agreement and test reliability met levels established in previous studies of intellectually normal individuals. It was concluded, therefore, that the revised RTT was both reliable and valid with the retarded and provided a basis for study of the relationship between role taking ability and behavioral indices of social adequacy. (Author/JD)

ABSTRACT 22864

EC 02 2864 ED 040 516
Publ. Date Sep 69 111p.
Fisher, Kirk L.
Effects of a Structured Program of Perceptual-Motor Training on the Development and School Achievement of Educable Mentally Retarded Children. Final Report.
Pennsylvania State University, University Park
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-0-8-082104-4702(032)
BR-8-B-104

Descriptors: exceptional child research; mentally handicapped; perceptual motor coordination; training; educable mentally handicapped; academic achievement; intelligence level; age differences

Of 102 educable mentally handicapped children in special classes, 54 were identified by the Purdue Perceptual Motor Survey (PMS) as deficient in perceptual motor abilities. These 54 children were assigned to one of the following groups: training, which participated in an individualized, structured perceptual motor program twice a week for 4 1/2 months; Hawthorne, which met with the trainer but played table games; and control. Achievement and intelligence tests were given. The hypothesized improvement in perceptual motor abilities did not manifest itself, although children under 10 years of age in the training group scored significantly higher on the PMS than did controls of like age. Nor did

hypothesized improvement in intellectual performance, or achievement result. However, all three groups improved significantly on PMS and achievement test scores; and training and Hawthorne groups showed significantly improved IQ scores. Thus, evidence suggested a correlation between perceptual motor ability and the variables of intelligence and achievement. (Author/JD)

ABSTRACT 22876

EC 02 2876 ED 040 528
Publ. Date Jul 68 26p.
Portal-Foster, C. W.
Mental Retardation in a Candadian Province: Elements of the Research Design. Report No. 1.
Canadian Welfare Council, Ottawa, Ontario, Research Branch
Canadian Department Of National Health And Welfare, Ottawa, Ontario
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; research proposals; social factors; psychological patterns; demography; incidence; research methodology; program planning; Prince Edward Island (Canada)

To study the psychological and social connotations of mental retardation in Canada, to identify demographic detail, and to develop research instruments and methodology, the proposed research studied the total population (110,000 persons) of Prince Edward Island. Subjects were randomly selected from ages 10 through 64. Prevalence tables are included, but the final results of the study are not yet available. The present knowledge is reviewed, and the methods to be used in the study are described. (JM)

ABSTRACT 22881

EC 02 2881 ED 040 533
Publ. Date Apr 68 92p.
Armstrong, Jenny R.
The Relationship of Mathematics Curriculum Innovation Presented Through Two Methods and Effect Upon Achievement as a Function of Learner Ability. Final Report.
Wisconsin University, Madison
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-1-7-070109-3888
BR-7-E-109

Descriptors: exceptional child research; mentally handicapped; mathematics; curriculum design; intermode differences; educable mentally handicapped; deductive methods; inductive methods; audiovisual instruction; curriculum research

Mathematical learning at six cognitive levels, in areas of exact and varied repetition, was studied in 28 educable mentally handicapped students (mean IQ 74, mean age 12.6). Four different machine-presented programs of 10 lessons each utilized inductive or deductive modes of presentation and exact or varied forms of curriculum repetition. Results indicated that number learning at the knowledge, application, and evaluation levels was better facilitated by an exact form of curriculum repetition. Mathematical learning of operations was equally facilitated by inductive and deductive modes of presentation. Both area and topical curriculum organization were equally effective, regardless of the mode of presentation used; however, exact repetition better facilitated learning at the comprehension level when implemented by the inductive mode, while varied repetition was more effective when implemented deductively. (Author/JD)

ABSTRACT 22901

EC 02 2901 ED 040 553
Publ. Date Dec 69 28p.
Graham, James T.; Graham, Louella W.
Auditory Perceptual Ability Related to Language Acquisition in Mentally-Retarded Children. Interim Report.
Emory University, Atlanta, Georgia
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-0-8-001242-1797(032)
BR-7-1242

Descriptors: exceptional child research; mentally handicapped; language; adolescents; language proficiency; linguistic competence; predictive ability (testing)

As part of a long range study of language behavior, six teenage mentally retarded males (IQ 37 to 64) were interviewed, and tapes were made to record language samples. Linguistic competence was found to be adequate while language performance was deficient. The sentence repetition test was found to be a useful predictor of problem areas for high corpus-error informants but not for those making few corpus errors. (Author/RJ)

ABSTRACT 23173

EC 02 3173 ED N.A.
Publ. Date 69 27p.
Cotten, Paul D.
The Effect of Secondary Reinforcing Cues and Two Schedules of Reinforcement on Programmed Learning Using Mentally Retarded Individuals.
EDRS not available
Southern Journal Of Educational Research; V3 N3 P193-219 Jul 1969

Descriptors: exceptional child research; mentally handicapped; educable mentally handicapped; programed instruction; reinforcers; reinforcement

To test the effect of secondary reinforcing cues and intermittent scheduling on programed learning with the mentally handicapped, 40 noninstitutionalized educable mentally handicapped children were taught a spatial organization task and a word learning task. The apparatus allowed simultaneous, separate, or combined presentation of the primary reinforcer and two secondary reinforcing cues. Different schedules of reinforcement using different secondary reinforcers or no secondary ones were used. Results showed intermittent schedules of secondary reinforcement more effective than continuous ones on the spatial organization task. Combined cues were no more effective than single ones, and neither of the single cues was more effective than the other. No conclusive results were obtained for the establishment of a secondary reinforcer. (KW)

ABSTRACT 23240

EC 02 3240 ED 010 289
Publ. Date 65 237p.
Blatt, Burton; Garfunkel, Frank
A Field Demonstration of the Effects of Non-Automated Responsive Environments on the Intellectual and Social Competence of Educable Mentally Retarded Children.
Boston University, Massachusetts, School Of Education
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-D-014
BR-5-0363

Descriptors: exceptional child research; mentally handicapped; preschool children; environmental influences; disadvantaged youth; educable mentally handicapped; preschool education; demonstration projects; academic abilities; social development; reinforcement; socioeconomic status; cognitive development; cognitive processes; academic achievement; program evaluation

A preschool program with children of low socioeconomic status was conducted to enhance their educability. The 74 subjects were randomly assigned to one control and two experimental groups. Provisions were made for an optimal nursery school environment by helping children to function socially in a group, participate in experiences designed to arouse curiosity, and train for acquisition of academic skills. Instruments employed over the 3-year program evaluated cognitive abilities including aptitide, achievement, and language; the noncognitive, including personality and social development; and environmental factors, including home and family. The groups were no different at the conclusion of the study than they were at the beginning. Also, no evidence was obtained to support the theory that intelligence scores can be improved. It was suggested that additional effort should be given to the nature-nuture interaction, the time to begin interventions, and possible intervention models. (JK)

ABSTRACT 23380

EC 02 3380 ED 014 406
Publ. Date May 67 771p.
Blake, Kathryn And Others
Learning of Basal Reading Skills by Mentally Handicapped and non-Mentally Handicapped Pupils. Final Report.
Georgia University, Athens
EDRS mf,hc
PROJ-5-0391
OEG-32-20-0450-1032

Descriptors: exceptional child research; mentally handicapped; gifted; reading; reading skills; reading achievement; cognitive processes; basic reading; elementary school students; phonetic analysis;

structural analysis; language skills; reading comprehension; Scott Foresman New Basic Readers

The study was designed to investigate achievement in basal reading skills by mentally handicapped, intellectually normal, and superior pupils taught with the Scott, Foresman New Basic Readers Series at reading instructional levels 2, 3, 4, and 5. Procedures varied, but all children spent from 1 1/4 to 1 1/2 hours daily in basal reading activities. Subjects were 947 public school pupils. Twenty tests were developed to assess 50 basal reading skills. Hierarchical sequences of basal reading skills based on level of complexity were determined (in phonetic analysis, structural analysis, dictionary, word functions, and comprehension), and the intellectual process involved in learning each skill was identified (associative memory, conceptualization, verbal meaning, and reasoning). In the majority of skills, the mentally handicapped, normal, and superior groups did not differ in rate of acquisition during the seven-month instructional period. For a majority of skills within each group, there was a significant linear trend (indicating improvement in skill achievement from grades 2 to 5) in the means at each of the instructional levels. Appendixes contain additional tables and figures, tests used, descriptions of skills, and statistical data. (TM)

ABSTRACT 23457

EC 02 3457 ED 041 421
Publ. Date (69) 147p.
Klaber, M. Michael
Retardates in Residence: A Study of Institutions.
Hartford University, West Hartford, Connecticut
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; institutionalized (persons); evaluation; institutional environment; institutionalized (persons); evaluation; institutional environment; institutional personnel; attendants; adjustment (to environment); interpersonal relationship; social relations; attitudes; behavior rating scales; rating scales; environmental influences; program descriptions; behavior; institutional facilities; comparative analysis

An introduction by Dr. David D. Komisar provides background and objectives for a study which eventually involved observations in six residential institutions. Two institutions were judged to be ineffective as residents appeared to be not happy or self-sufficient, showed little intellectual growth (or were rarely, if ever, retested), had many stereotyped behaviors, and manifested excessive needs for social reinforcement. One institution emerged as clearly effective and one as moderately so. In five of six institutions, other ward residents were the greatest source of interpersonal contacts; in only one institution did attendants and other nonretarded adults interact as frequently with residents. Between one third and one half of the time of severely retarded residents of the typical institution was spent in doing nothing. The attitudes of attendants at the different institutions showed remarkable consistency. While verbal and psychological attitudes of parents did not differentiate between effective and ineffective institutions, parents of children in an effective residence visited children more frequently. Additional research results and implications are presented, and schedules of a typical day at each institution are included. (RJ)

ABSTRACT 23479

EC 02 3479 ED 041 440
Publ. Date 70 85p.
Gottwald, Henry
Public Awareness about Mental Retardation. CEC Research Monograph.
Eastern Michigan University, Ypsilanti
Office Of Education (DHEW), Washington, D. C.
EDRS mf

Descriptors: exceptional child research; mentally handicapped; demography; attitudes; statistical data; public opinion

To identify the status of public knowledge about mental retardation, to discern public attitudes, and to obtain demographic information on attitudes, a questionnaire was submitted to approximately 1,515 subjects. Extensive results are reported by generic presentation of total responses, analysis of data by independent variables, and analysis of semantic differential. The major appendix provides information on the instrumentation for the study, the questionnaire, and the coding keys. Independent variables were sex, age, education, occupation, income, race, marital status, number of children, demography, geography, and religion. (JM)

ABSTRACT 23489

EC 02 3489 ED 016 106
Publ. Date Aug 66 157p.
Karnes, Merle B., And Others
The Efficacy of a Prevocational Curriculum and Services Designed to Rehabilitate Slow Learners Who Are School Dropout, Delinquency, and Unemployment Prone. Final Report.
Champaign Community Unit IV Schools, Illinois
EDRS mf,hc
VRA-RD-1075

Descriptors: exceptional child research; mentally handicapped; slow learners; prevocational education; student rehabilitation; disadvantaged youth; vocational counseling; vocational adjustment; dropout prevention; delinquency prevention; work study programs

It was hypothesized that 91 slow learners from low socioeconomic status homes, in a carefully designed two-year vocationally oriented educational program with prevocational counseling, would show achievement superior to that of a matched control group enrolled in a regular educational program. Data were collected from school records, interviews, case studies, psychological tests, and Division of Vocational Rehabilitation records. The experimental subjects had significantly better attendance, fewer school dropouts, and made a better vocational adjustment than the control group. There was no significant difference between the two groups in social and emotional adjustment. Achievement test scores for the tool subjects of arithmetic, reading, and spelling showed no significant differences between the two groups in amount gained. Some implications for program implementation were that specially trained administrative and teaching personnel should be employed for this kind of program, the ratio of teacher to youth should be no greater than one to 20, and the curriculum should be functional, individualized, and vocationally oriented. A review of related literature, a complete program description, and recommendations for further research and programing are included. (ET)

ABSTRACT 23544

EC 02 3544 ED 042 277
Publ. Date Sep 68 28p.
Portal-Foster, C. W. And Others
Mental Retardation in a Canadian Province: Pilot Study and Design Development, to September, 1968. Report No. 2.
Canadian Welfare Council, Ottawa (Ontario)
Canadian Department Of National Health And Welfare, Ottawa (Ontario)
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; incidence; field studies; social factors; personal adjustment; social adjustment; socialization; field interviews; foreign countries; Canada

The second report on the Canadian Welfare Council's study of the social and psychological aspects of mental handicaps in the population of Prince Edward Island reviews the development of the project, describes its current status, and outlines plans for continuation. The purpose of the study is to define the nature and prevalence of mental handicaps and thereby obtain valuable data for more adequate social planning and treatment for the mentally handicapped. Discussed are the development of the project to May 1968, details of the May to August operations (development of methodology, pilot study, construction of interview schedule, hiring and training the interview team, field work, data analysis), the present status as of September 1, 1968, and future plans. (KW)

ABSTRACT 23546

EC 02 3546 ED 042 279
Publ. Date Mar 70 25p.
Duncan, Ann Dell
Behavior Rates of Exceptional Children.
Yeshiva University, New York, New York, Department Of Special Education
EDRS mf,hc
Paper Presented At The American Educational Research Association (Minneapolis, Minnesota, March, 1970).

Descriptors: exceptional child research; classification; handicapped children; behavior rating scales; educational diagnosis; mentally handicapped; emotionally disturbed; minimally brain injured; learning disabilities; identification; measurement techniques

The paper discusses the effects of labels on exceptional children and the benefits of tracking individual or class behaviors instead of mere labels. To determine the sensitivity of behavior rate in planning remedial action, 97 children (mentally retarded, emotionally disturbed, regular, learning disabled, and brain damaged) were rated on five behaviors (tapping, walking, reading, answering, and counting). The results indicate that behavior rates from all categories overlapped, rates of regular children were significantly faster than the retarded but no different from the other categories, and there were no significant differences between the four exceptionalities. Conclusions are that there may have been too varied collection procedures, the behaviors rated were not sensitive to the differences in the children, or the children may have been mislabeled. In the future, labels must become much more individualized. (JM)

ABSTRACT 23576

EC 02 3576 ED 042 309
Publ. Date Jan 70 137p.
Siegenthaler, Bruce M.
Factors Related to the Speech-Hearing of Children of Below Normal Intelligence. Final Report.
Pennsylvania State University, University Park
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf,hc
OEG-08080426-4586-032
BR-8-0426

Descriptors: exceptional child research; mentally handicapped; auditory discrimination; auditory perception; educable mentally handicapped; intelligence differences; age differences; institutionalized (persons); etiology; testing

Tests were administered to 209 educable mentally handicapped children (mean age 10.8, mean IQ 77) to determine factors related to speech hearing. Results indicated that mental age, intelligence quotient, physiological age, institutionalization, and organic bases for retardation were not significantly related either to speech reception threshold or to speech discrimination test scores. However, chronological age was related to test performance. Also, the threshold and the discrimination by the Identification of Pictures tests were found both reliable and useful with the educable retarded subjects. (Author/JD)

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